Claims

1. A process for preparing spherical oxide particles comprising the steps of shaping a starting material comprising an oxide hydrate into particles of substantially constant length by leading the material to a set of two rolls rotating towards each other followed by leading the material to a roll equipped with grooves to form rod-type shapes, cutting the rod-type shapes into particles of substantially constant length, converting the thus formed particles into spheres, and heating the particles to convert the oxide hydrate into an oxide.

2. The process of claim 1, wherein a lubricating oil is added before and/or after cutting.

3. Spherical oxide particles having a wear rate of less than 0.5 wt.%, more preferably less than 0.1 wt.% and substantially no difference in density between the core portion of the particles and the surface portion of the particles.

4. The spherical oxide particles of claim 3 wherein the wear rate is less than 0.1 wt.%.

5. A process for preparing a hydroprocessing catalyst in which a Group VI and/or a Group VIII metal component are incorporated into spherical oxide particles prepared by way of a process comprising the steps of shaping a starting material comprising an oxide hydrate into particles of substantially constant length by leading the material to a set of two rolls rotating towards

each other followed by leading the material to a roll equipped with grooves to form rod-type shapes, cutting the rod-type shapes into particles of substantially constant length, converting the thus formed particles into spheres, and heating the particles to convert the oxide hydrate into an oxide.

6. The process of claim 5, wherein the metal components are a Group VI metal component and optionally a Group VIII metal component.

7. A process for the hydroprocessing of a hydrocarbon feed in which the feed is contacted with a catalyst prepared by the process of claim 5.